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WEEKLY PLANNING

2/16/06

Don Lynch

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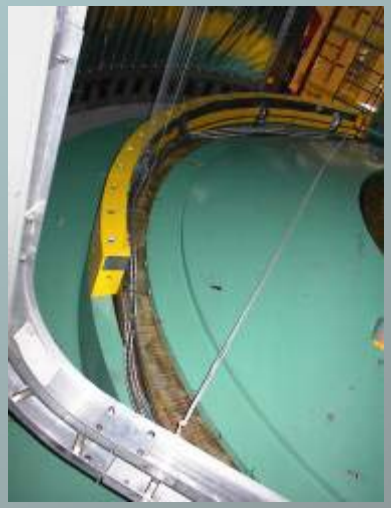
Prep for Run 6 Completed



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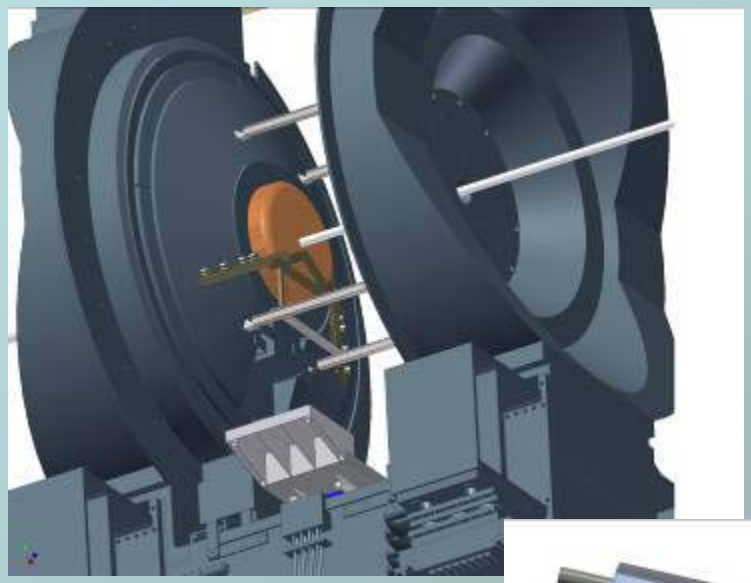
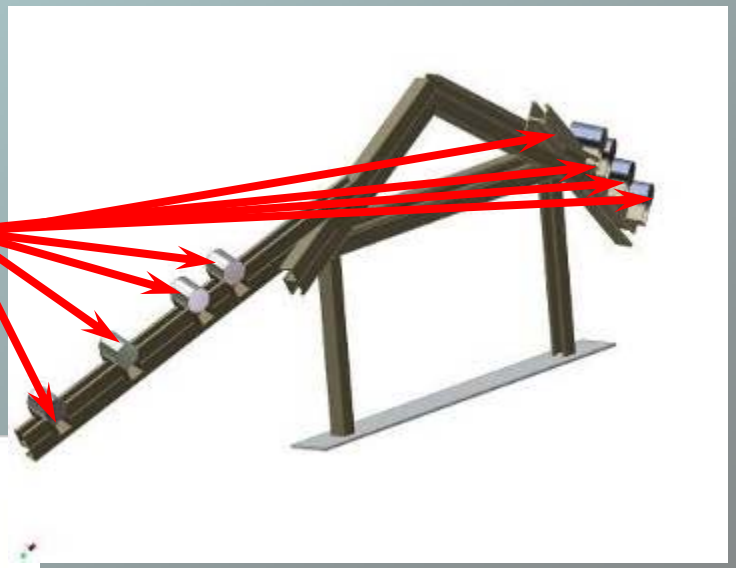
RXNP PMT in magnetic field tests Completed





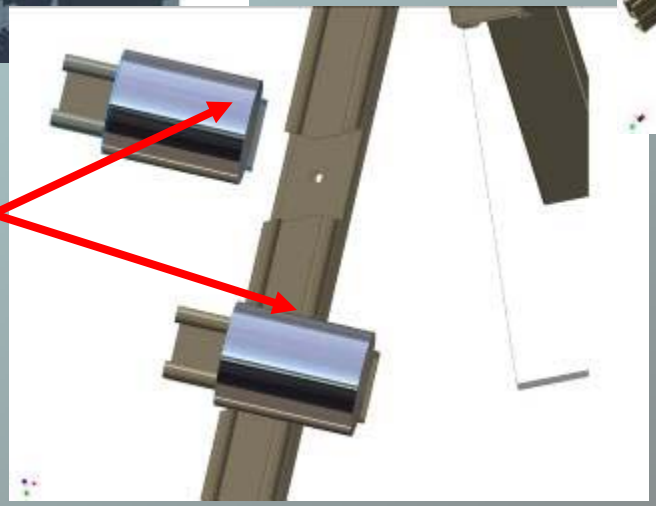


Photo-multiplier Tubes (PMT's)

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RXNP PMT in magnetic field tests Completed

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Start of Run Party

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Miscellaneous Remaining Tasks

- MPC test and fix
- MPC dry air supply manifold
- BLM test
  - Fabricate fixture
  - Install for run
  - Un-install when HBD is installed
- Install helium bags
- Start recording physics
- New LN2 Dewar for BBC cooling gas (replacing dry air)
- Install HBD (~March-April prototype and/or ~May ½ final design)

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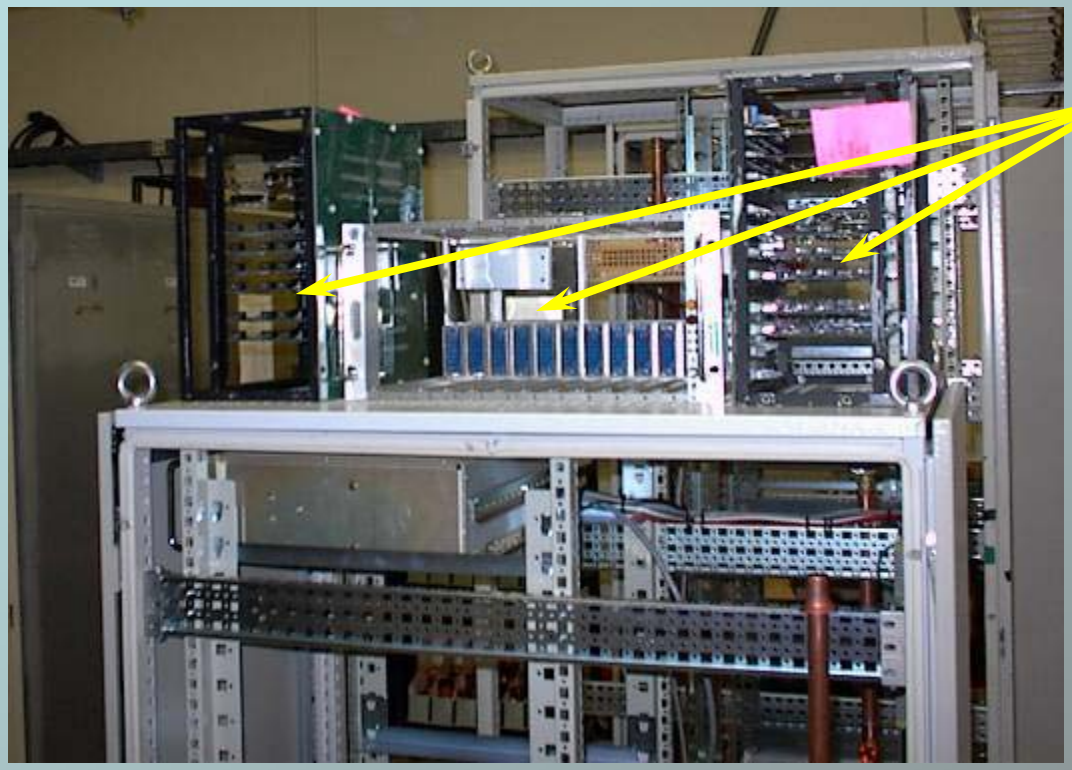
MPC Installation



MPC electronics to be on top of MuTr rack on eyebrow

Electronics not ready yet

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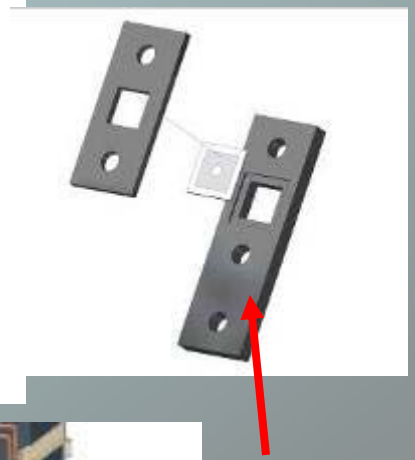
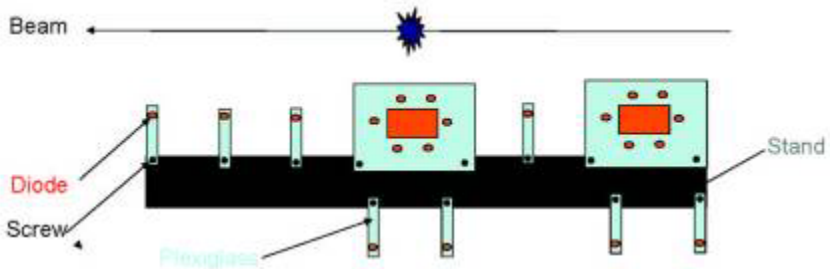
Beam Loss Monitor Tests

- 3 BLM's
- 2 Chipmunks
- 2 stripixel detector samples
- 16 diodes (8 small, 8 large)
- 2 thermorecorder buttons



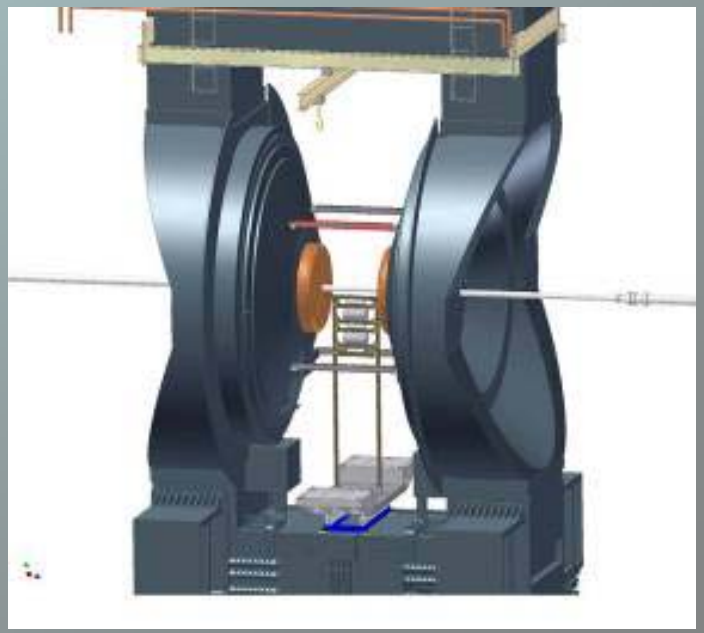
Diode Holder

Idea for Mechanical Support of the Sensors/Diodes for Radiation Tests at IR



30cm /8 diodes= every 3.75 cm you have one diode

* 30 cm is the length of the silicon strip frame



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LN_2 Storage Dewar for BBC

Acme Cryogenics 6000 Gallon vessel

23' long x 10'4" high, 7' wide footprint 219psig MAWP, we would set MOP to 125psig.
Original Mfr.:
Linde, NB #6363 ser.#206
Remanufactured by Chart

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LN_2 Supply

- Acquire ASME NB certified 6000 gal LN_2 Dewar
- CA internal cryo and mechanical safety review
- Modify gas pad layout to accommodate dewar
- Install dewar on pad

LN2 dewar to be located on south side of pad beyond CO2 unit shown here

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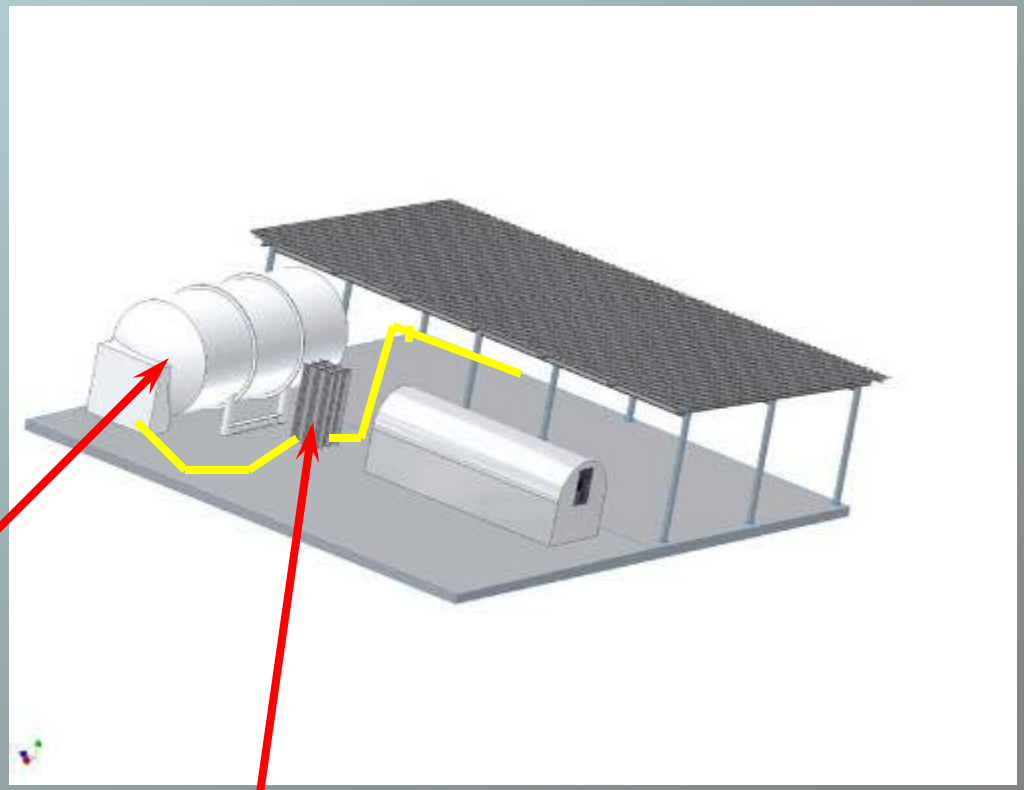
LN_2 Storage Dewar for BBC



LN_2 Vessel to go here

Vaporizer

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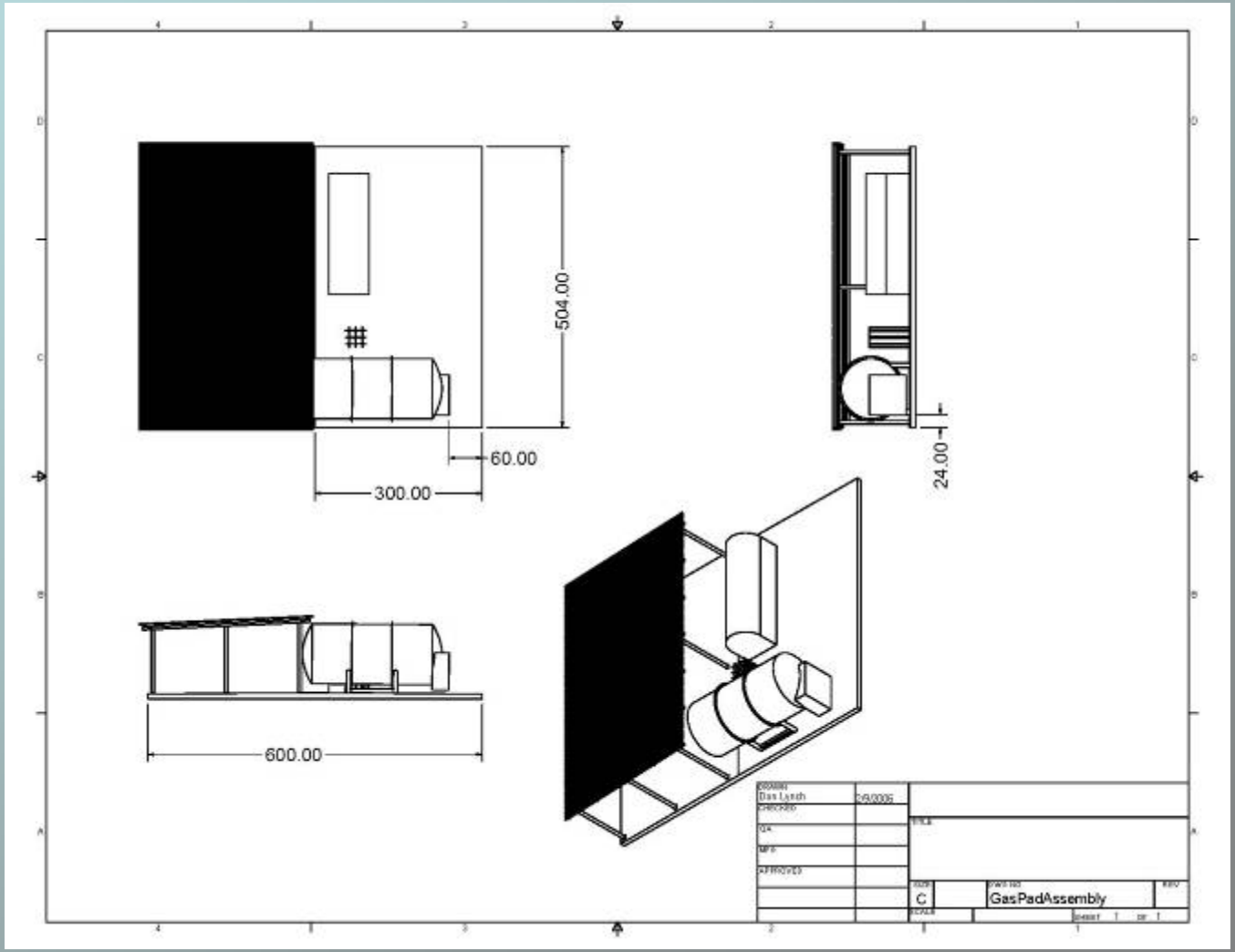
LN_2 Storage Dewar for BBC

New Gas Pad Design. Dimensions and access to be added. Estimated weight of 6000 gallon tank 30 tons when full, 10 tons when empty.

Experimental safety review required.



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LN_2 Storage Dewar for BBC

1. purchase Cu pipe and fittings - CB [in process]
2. Remove unistrut in the way - CB/JT [DONE]
3. Remove LN2 buggy electrical drop -Mike R [DONE]
4. Finalize orientation of tank and vaporizer -DL/CB/JT [in process]
5. Complete copper run -CB/JT [in process]
6. Get firm delivery date -CB [Monday Feb. 27]
7. Get what installer needs to his job, arrange for LN2 delivery –CB [in process]
8. Coordinate rigging for delivery --DL/CP [notified Al Pendzick]
9. Get all necessary approvals from safety people --DL/CB [in process]

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Other Projects

TOF West

- Expect detectors to be at BNL by May 1.

HBD

- Will need new He bags?
- Install prototype late March/early April
- Plan for installation of ½ final detector late May/early June
- Need to design & fabricate cable support structure for prototype and final design

MPC North

- New enclosure & fixture design to be based on lessons learned from south installation

RXNP

- Tests complete waiting for design info for support structure

RPC

- Waiting for design info

Engineering Documentation

- Documentation/Drawings data base with web based retrieval
- 3D model at detector outline level with utility envelopes
- utility schematics

Beampipe design

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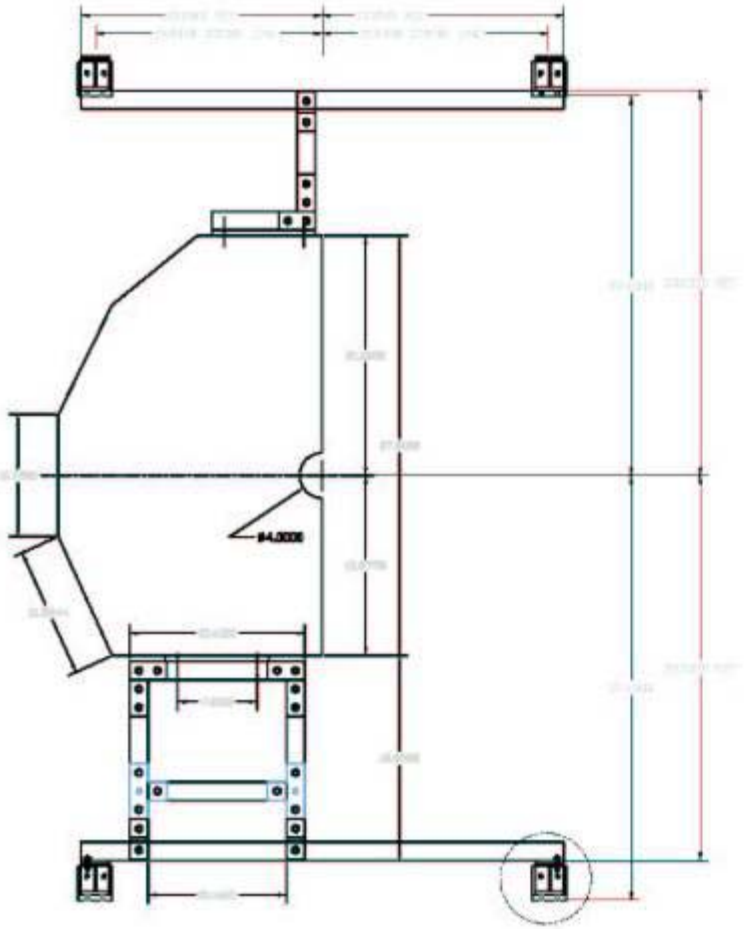
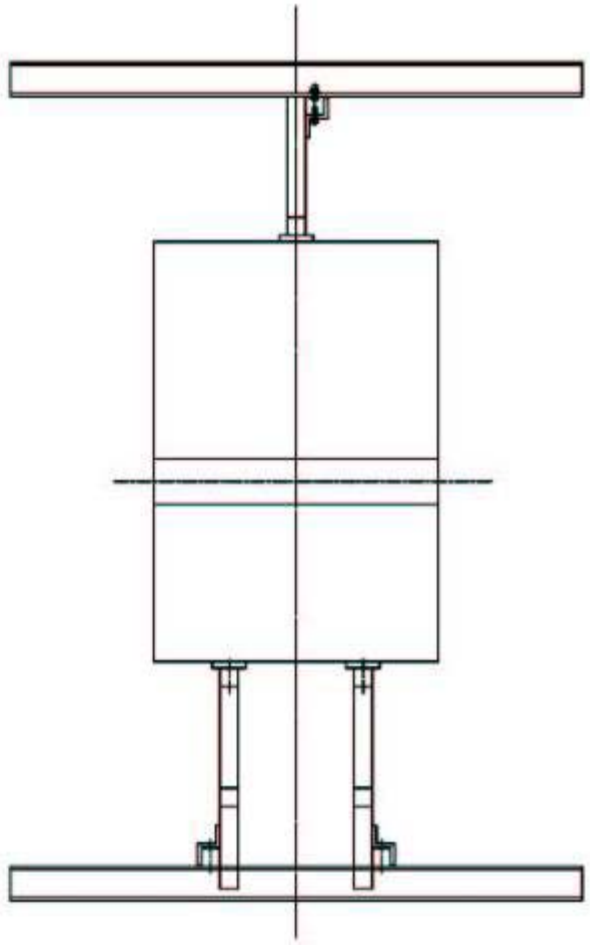
HBD Prototype Mounting





Prototype can not use final design mounting due to differences in location of connectors and other basic design differences.

Final HBD design is not yet fixed.

Prototype mounting to be fabricated from fg unistrut.

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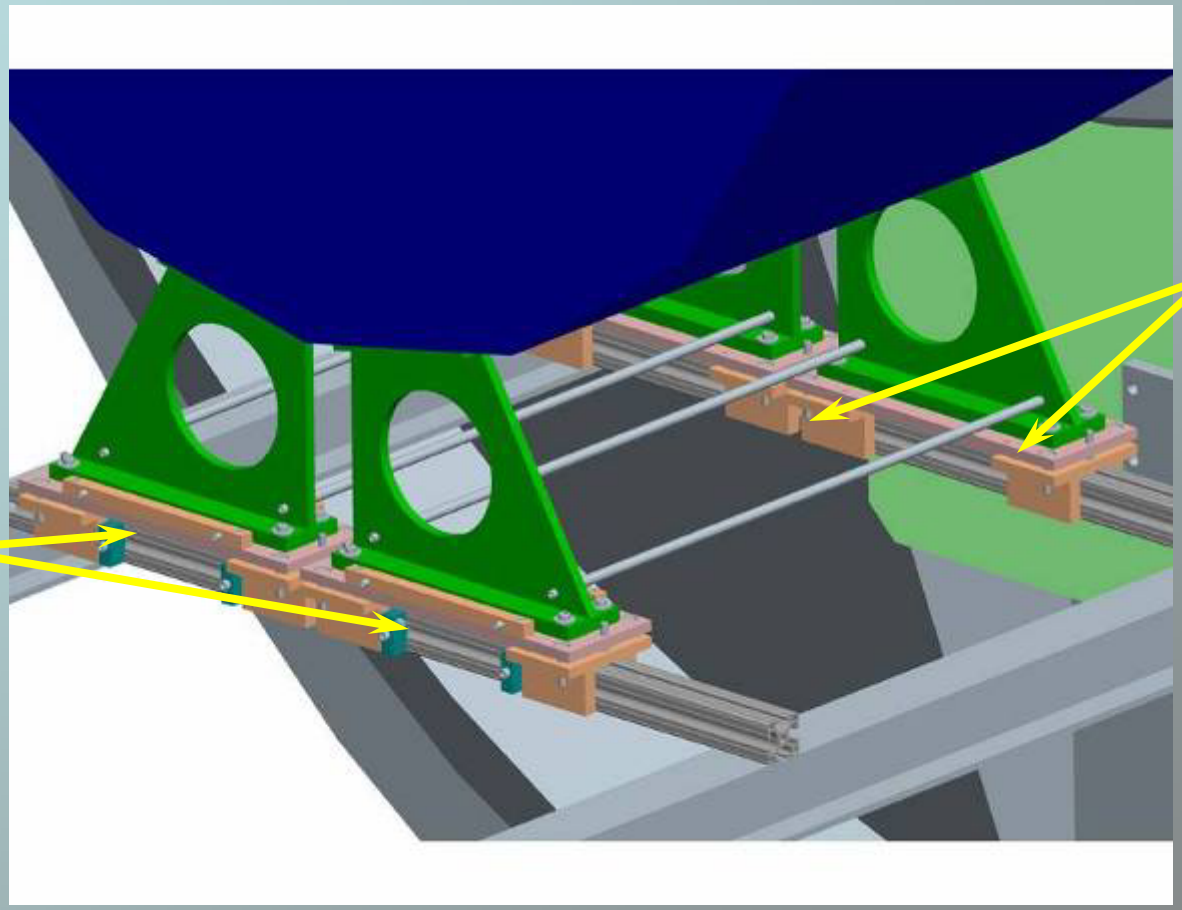
HBD
Mechanical Support



HBD Support
X, Y, Z
adjustments on
this side

HBD Support
X, Y
adjustments on
this side

Design of details complete ready for fabrication. Last minute changes to HBD mounting interface to be addressed before routing drawings to shops for fabrication.

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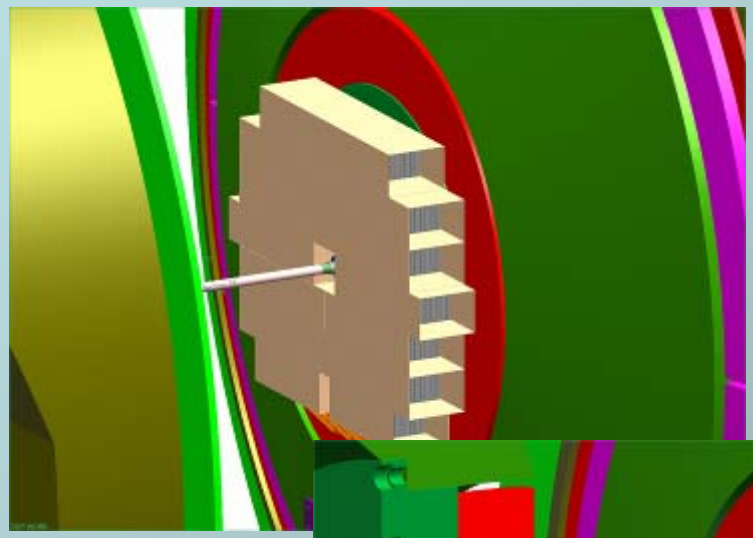
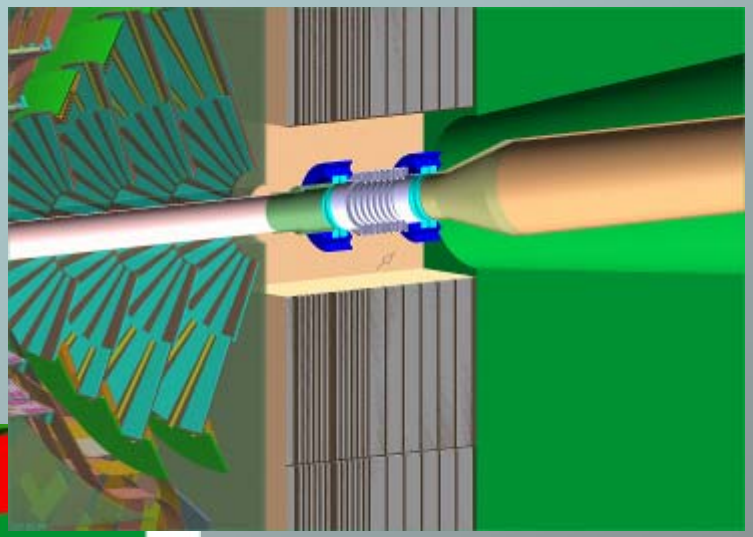
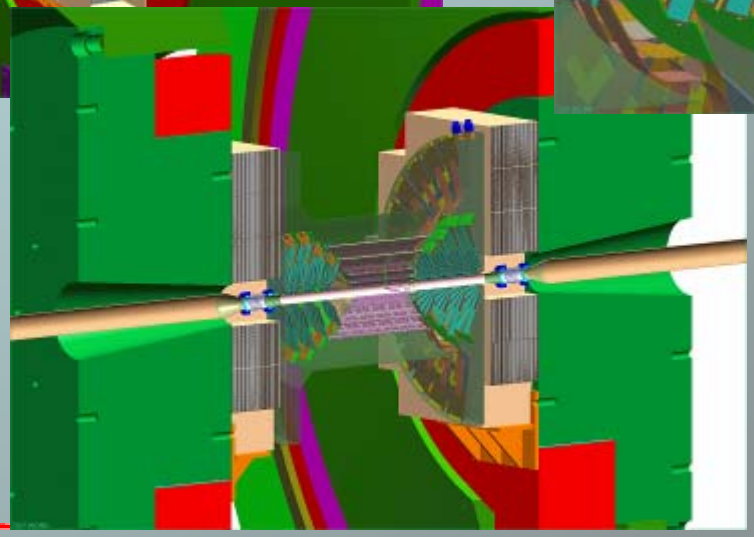
New Beampipe for Upgrades







A concept discussed between Jan Boissevain of LANL and D. Lynch of BNL. Requires suport built in to NCC and temporary isolating support to move CM.

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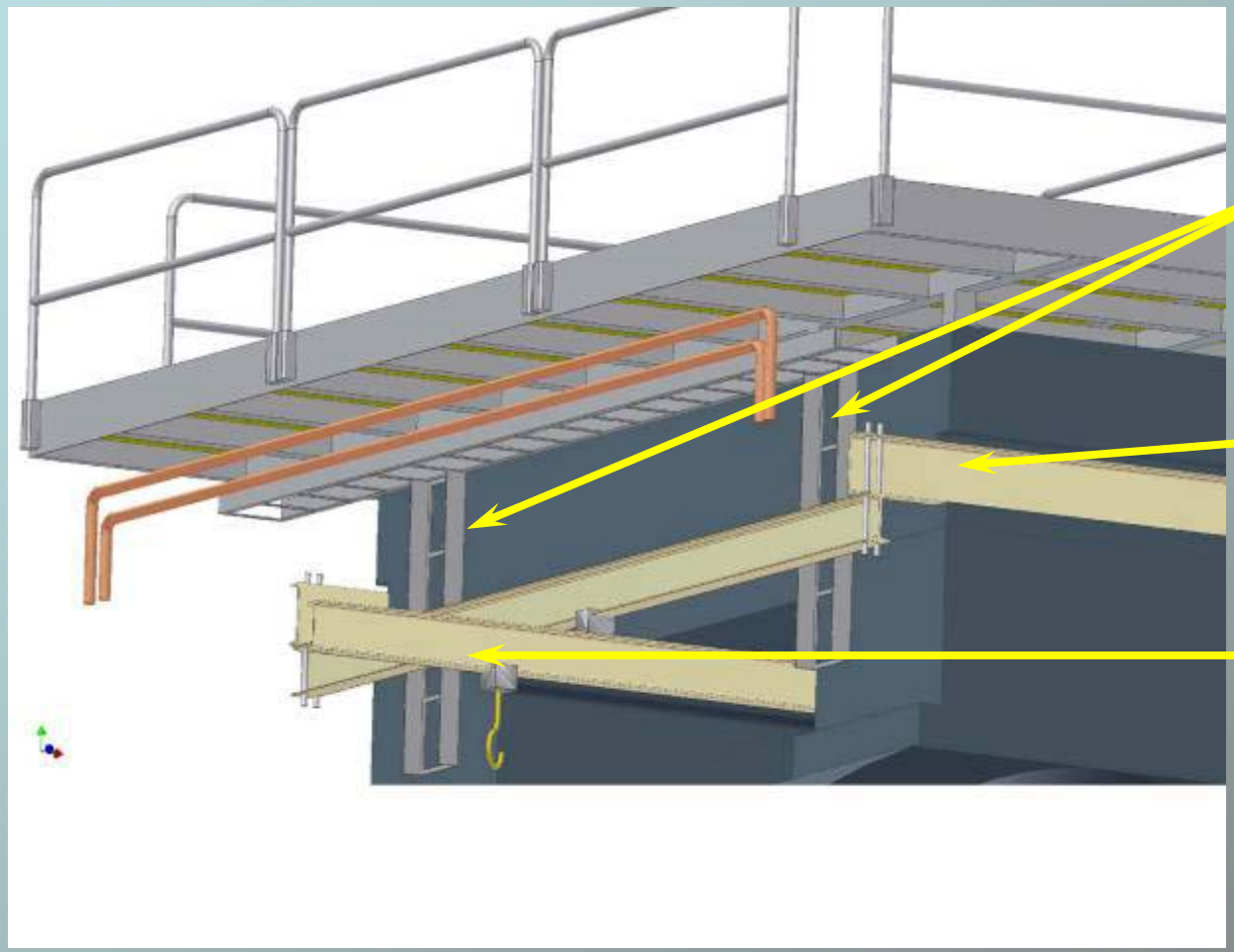
CM Region Crane & Cable Routing Concept



Cable Trays to route cables NCC Detector from Bridge

Crane Supports use existing flux return notches

CM Crane north-south & east-west motions; extended travel east to existing crane coverage

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CM Region Stairs

Something a little more substantial would be nice

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C-A Tasks

Current Tasks

- Support for LN_2 dewar installation
- General run support
- New storage trailer (as promised by Charlie)
- Fix roof leaks

Tasks for Shutdown 2006

- Install access platforms from EC top north and MMS
- Replace emergency fan louvres
- Rewire/add IR ceiling lights on emergency power
- Replace WC sliding platform hoisting cables
- Analyze/balance rack water distribution
- Mixing house exhaust fan maintenance

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Shutdown 2006

We expect a short shutdown with a full plate of work

- June '06: end run 5, prep for start of shutdown, prep EC for move to AH
- July '06: TOF West installation, HBD installation
- Aug. '06: MPC North installation, RXNP installation
- Sep. '06: Detector subsystems maintenance, roll EC in, prep for run 6
- Oct. '06: Start of Run 6

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PHENIX Engineering & Tech Support Web Pages

Links for weekly planning meeting slides, long term planning and other technical info can be found from the web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

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